SECTION II—CLAIMS

1. (Original) A method, comprising:

optically coupling a test structure to a device on a wafer, the test structure included on the wafer, the test structure comprising a first region, a second region, and an interface defined between the first and second regions, the second region comprising a material different from a material of the first region, wherein the test structure is optically coupled to the device in a manner to allow the interface to direct a light beam emitted from the device in a direction different from an original direction of the emitted light beam; and

detecting the light beam directed from the interface.

2. (Original) The method of claim 1 wherein optically coupling the test structure to a device includes optically coupling the test structure to a side-emitting laser.

3. (Original) The method of claim 1 wherein directing the light beam comprises reflecting the light beam from the interface defined between the first and the second regions and wherein the first and the second regions are comprised of materials having two different refractive indexes.

4. (Original) The method of claim 1 wherein optically coupling the test structure to the device on the wafer includes coupling the test structure to a back facet of the device.

5. (Original) The method of claim 1 wherein the light detector is positioned to receive the light beam emitted from the device.

6. (Original) The method of claim 1 wherein detecting the light beam includes detecting a frequency and intensity of the emitted light beam.

7. (Original) The method of claim 1 wherein the detecting the light beam includes detecting the light beam with at least one of a photodiode, avalanche photodiode, positive-intrinsic-negative (PIN) detector, and a charge coupled device.

8. (Original) The method of claim 7 wherein a light detector is integrated into the test structure.

9. -18. (Canceled)

19. (Original) A process, comprising:

forming a semiconductor device on a wafer; and

forming a test structure on the wafer, the test structure optically coupled to an end of the semiconductor device, comprising:

depositing a photoresist material on a first region adjacent to the semiconductor device;

selectively removing portions of the photoresist material to form inclined sections separated by openings to expose the first region; and

selectively etching the first region through the openings to remove portions of the first region to form an incline on the first region based on the incline of the sections and to form a second region.

20. (Original) The process of claim 19, further comprising depositing a reflective material on the incline of the first region.

21. (Original) The process of claim 19 wherein the first region has a first index of refraction, the process further comprising placing a material with a second index of refraction over the first region to fill the second region.

22. (Original) The process of claim 19, further comprising forming a photosensitive device adjacent to the end of the semiconductor device.

23.-26. (Canceled)

27. (Original) A method, comprising:

directing a light beam emitted from a device in a wafer in a direction different from an original direction of the light beam as emitted from the device, via use of a test structure included on the wafer;

detecting the directed light beam; and

evaluating the detected light beam.

28. (Original) The method of claim 27 wherein directing the light beam comprises redirecting the emitted light beam from an interface between two materials of different indexes of refraction.

29. (Original) The method of claim 27 wherein evaluating the detected light beam comprises evaluating at least one of an intensity of the detected light beam and a frequency of the detected light beam.